Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-53. (canceled)

- 54. (Currently Amended) A method for <u>preserving preservation of a biological material</u>, comprising:
 - (a) adding a preservation solution to said biological material, said preservation solution comprising one or more polyphenols;
 - (b) cooling freeze drying the biological material; and
 - (c) storing the biological material at <u>under</u> appropriate storing conditions.
- 55. (Currently Amended) The method of claim 54, wherein the <u>one or more</u> polyphenols comprise one or more catechins.
- 56. (Currently Amended) The method of claim 55, wherein the <u>one or more</u> catechin<u>s are</u> is epigallocatechin gallate (EGCG) <u>catechins</u>.
- 57. (Currently Amended) The method of claim 54, wherein the <u>one or more</u> polyphenols are derived from green tea extract (GTE).

Natan et al. Application No. 10/588,126 Page 3 of 14

- 58. (Previously Presented) The method of claim 54, wherein the preservation solution does not comprise a significant amount of glycerol.
- 59. (Currently Amended) The method of any of claim 54, wherein the preservation solution does not comprise a significant amount of DMSO.
- 60. (Previously Presented) The method of claim 54, wherein the preservation solution comprises a macromolecule.
- 61. (Previously Presented) The method of claim 54, wherein the macromolecule is dextran.
- 62. (Previously Presented) The method of claim 54, wherein the preservation solution comprises trehalose.
- 63. (Previously Presented) The method of claim 54, wherein the preservation is cryopreservation, the preservation solution is a cryopreservation solution, and the cooling freeze drying of step (b) is to a temperature below 0°C.
- 64. (Currently Amended) The method of claim 63, wherein the cryopreservation is freezing, and the cryopreservation solution is a freezing solution, and the cryopreservation of step (c) is by freezing.

Natan et al. Application No. 10/588,126 Page 4 of 14

65. (Cancelled)

66. (Currently Amended) The method of claim 54, wherein the biological material

comprises cells selected from the group consisting of red blood cells (RBC), white blood

cells (WBC), mononuclear cells (MNC), umbilical cord blood cells (UCB), hematopoietic

stem cells (HSC)[[,]] and bacteria.

67. (Currently Amended) The method of claim 66, wherein the biological material

comprises RBC and the biological material is frozen such that after thawing under in

appropriate thawing conditions the biological material comprises free hemoglobin levels

below 10 percent.

68. (Currently Amended) The method of claim 67, wherein the one or more polyphenols

comprise the catechin epigallocatechin gallate (EGCG) and the preservation solution does

not comprise a significant amount of glycerol or DMSO.

69. (Currently Amedned) The method of claim 67, further comprising:

(d) thawing the said biological material under in appropriate thawing conditions

such that, after thawing, the biological material comprises RBC suspended

in a liquid; and

(e) separating the said RBC from said liquid.

Natan et al. Application No. 10/588,126 Page 5 of 14

- 70. (Currently Amended) The method of claim 68, which wherein the method does not comprise a step of washing the biological material.
- 71. (Currently Amended) The method of claim 69, wherein step (e) further comprises:
 - (e') centrifuging the biological material such that the majority of RBC are in a pellet and the majority of the liquid is in a supernatant; and
 - (e") removing the supernatant.
- 72. (Previously Presented) The method of claim 71, wherein after step (e") the free hemoglobin levels in the pellet are below 2 percent.
- 73. (Previously Presented) A biological material preserved by the method of claim 54.
- 74. (Currently Amended) The biological material of claim 73, wherein the <u>one or more</u> polyphenols comprise one or more catechins.
- 75. (Currently Amended) The biological material of claim 74, wherein the <u>one or more</u> catechins are is epigallocatechin gallate (EGCG) <u>catechins</u>.
- 76. (Previously Presented) The biological material of claim 73, wherein the biological material does not comprise a significant amount of glycerol.

Natan et al. Application No. 10/588,126 Page 6 of 14

77. (Previously Presented) The biological material of claim 73, wherein the biological material does not comprise a significant amount of DMSO.

78. (Currently Amended) The biological material of claim 73, having comprising less than 10% H₂O as compared with its H₂O content before preservation.

79. (Currently Amended) A frozen viable biological material, comprising:

RBC, and characterized in that

wherein after thawing in under appropriate thawing conditions, the biological material comprises free hemoglobin levels of below 2 percent.

- 80. (Currently Amended) The frozen biological material of claim 79, <u>further comprising</u> having essentially no glycerol.
- 81. (Currently Amended) The frozen biological material of claim 79, <u>further comprising</u> having essentially no DMSO.
- 82. (Currently Amended) A method of preparing a preservation solution for preserving a biological material, comprising:

mixing one or more polyphenols with a physiologically acceptable carrier.

83. (Currently Amended) The method of claim 82, wherein the <u>one or more</u> polyphenols comprise one or more catechins.

Natan et al. Application No. 10/588,126 Page 7 of 14

- 84. (Currently Amended) The method of claim 83, wherein the <u>one or more</u> catechins are is epigallocatechin gallate (EGCG) <u>catechins</u>.
- 85. (Currently Amended) The method of claim 81, wherein the <u>one or more</u> polyphenols are derived from GTE.
- 86. (Currently Amended) A method for the preservation of a biological material comprising RBC, comprising:
 - freezing freeze drying the biological material under in appropriate freezing
 freeze drying conditions; and
- (b) storing the biological material at <u>under appropriate storing conditions</u>,[[;]] wherein said method characterized in that after thawing <u>under in appropriate</u> thawing conditions the biological material comprises free hemoglobin levels of below 10 percent.
- 87. (Currently Amended) The method of claim 86, wherein the appropriate freezing freeze drying conditions include comprise adding addition of a freezing solution.
- 88. (Currently Amended) The method of claim 86, wherein the said freezing solution comprises one or more polyphenols.

Natan et al. Application No. 10/588,126 Page 8 of 14

- 89. (Currently Amended) The method of claim 86, the method further comprising:
 - (c) thawing the said biological material [[in]] under appropriate thawing conditions such that, after thawing, the biological material comprises RBC suspended in a liquid; and
 - (d) separating the said RBC from the said liquid.
- 90. (Currently Amended) The method of claim 89, wherein step (d) further comprises:
 - (d') centrifuging the biological material such that the majority of RBC are in a pellet and the majority of the liquid is in a supernatant; and
 - (d") removing the supernatant.
- 91. (Currently Amended) The method of claim 90, wherein said free hemoglobin levels are below 2 percent.
- 92. (Currently Amended) A method for <u>preserving preservation of a biological material</u>, comprising:
 - (a) adding a preservation solution essentially free from any polyalcohol[[,]] to said the biological material;
 - (b) seeding freeze drying the biological material; and
 - (c) storing the biological material <u>under at appropriate storing conditions</u>.
- 93. (Previously Presented) A preserved viable biological material, having a volume exceeding 1 ml, preserved for a period exceeding 40 days.